

ATTACHMENT A

Amendment to the Claims



This listing of claims will replace all prior versions, and listings, of claims in the application:

1-49 (CANCELLED).

50. (Currently Amended) A method of ~~alleviating symptoms of~~ treating an infertility condition in a mammalian prospective mother, said method comprising:

exposing said prospective mother to:

a) one or more sperm antigens or MHC Class I antigens of a prospective father, and

b) a substantially purified TGF β selected from the group consisting of TGF β_1 , TGF β_2 , TGF β_{13} and activin,

thereby to induce tolerance to said antigen or antigens,

wherein said MHC Class I antigen is one which is present on leukocytes or in seminal plasma of said prospective father.

51. (Currently amended) The method according to claim 50, wherein the exposure to one or more antigens is to a mucosal surface of the prospective mother ~~is exposed to one or more antigens.~~

52. (Previously presented) The method according to claim 51, wherein the mucosal surface is selected from the group comprising of an oral mucosal surface, a respiratory mucosal surface, a gastrointestinal mucosal surface or a genital mucosal surface.

53. (Previously presented) The method according to claim 51, wherein the mucosal surface is a genital mucosal surface.

54. (Previously presented) The method according to claim 51, wherein the one or more antigens and TGF β is injected for systemic contact.

55. (Previously presented) The method according to claim 51, wherein the TGF β and the one or more antigens are administered at one site.

56. (Previously presented) The method according to claim 51 wherein the TGF β and the MHC Class I antigen or antigens are each administered at a first site and a different site respectively.

57. (Currently amended) The method according to claim 50 wherein the TGF β and the MHC Class I antigen or antigens are administered ~~temporarily~~ temporally spaced apart.

58. (Previously presented) The method according to claim 57, wherein the one or more antigens are administered subsequent to an administration of the TGF β .

59. (Previously presented) The method according to claim 57, wherein the one or more antigens are administered first followed by administration of TGF β .

60-63. (CANCELLED)

64. (Previously presented) The method according to claim 50 wherein the MHC Class I antigen or antigens administered are from sperm cells of the prospective father.

65. (Previously presented) The method according to claim 51 wherein the MHC Class I antigen or antigens administered are from sperm cells of the prospective father.

66. (Previously presented) The method according to claim 50, wherein the one or more antigens are presented in purified or semi-purified form.

67. (Previously presented) The method according to claim 66, wherein the purified or semi-purified one or more antigens are presented on inert or adjuvant carriers.

68. (Currently amended) The method according to claim 51, wherein ~~humans are being treated~~ the prospective mother and father are human, ~~and the exposure of TGF β is to a mucosal surface~~ and the level of TGF β is greater than 50 ng/mL with a total dose of 150 ng/mL.

69. (Previously presented) The method according to claim 51, wherein the mucosal surface is exposed to a concentration of TGF β of between 100 and 400 ng/mL with a total dose of between 100 to 2000 ng.

70. (Previously presented) The method according to claim 50, wherein the TGF β is supplied in a slow release form.

71. (Previously presented) The method according to claim 50, wherein the exposure of the one or more antigens is to the prospective mother's genital tract in the form of the prospective father's ejaculate, and the level of exposure is determined by the cell count and antigenic density on the surface of such cells.

72. (CANCELLED)

73. (CANCELLED)

74. (CANCELLED)

75. (CANCELLED)

76. (CANCELLED)

77. (CANCELLED)

78. (CANCELLED)

79. (Previously presented) The method according to claim 50, wherein TGF β is administered in its active form.

80. (CANCELLED)

81. (Previously presented) The method according to claim 50, wherein the prospective mother is incapable of converting a sufficient amount of the inactive form of TGF β to active TGF β , and the method of treating includes administration of active TGF β .

82. CANCELLED

83. (Previously presented) The method according to claim 50, wherein the prospective mother is incapable of converting the inactive form of TGF β to active TGF β , and the method of treating includes administration of plasmin, so as to increase the level of active TGF β .

84. CANCELLED

85. CANCELLED

86. (Currently amended) The method according to claim 51, wherein the prospective mother and father are human ~~humans are being treated~~ and the exposure to TGF β and ~~male antigen~~ the one or more antigens of the prospective father is a multiple exposure.

87. (Currently amended) The method according to claim 86, wherein the multiple exposure is ~~preferably~~ performed over a period spanning at least three months prior to attempted conception.

88. (Currently Amended) The method according to claim 50, wherein the prospective mother and father are human ~~humans are being treated~~ and exposure is at least one week before conception is attempted.

89. (Previously presented) The method according to claim 50, wherein the exposure is before attempted conception.

90. (Currently amended) The method according to claim 50, wherein administration of TGF β ~~or derivative or analogue thereof~~ and the one or more antigen antigens occurs at least once after the prospective date of conception.

91. (Previously presented) The method according to claim 90, wherein the exposure continues over a period of the first 12 weeks of pregnancy.

92. (Currently amended) The method according to claim 50, ~~first~~ including the step, prior to exposure to antigen and TGF β , of diagnosing or testing whether the ~~male~~ prospective father has adequate levels of TGF β or the ~~female~~ prospective mother has the capacity to activate TGF β , or alternatively whether anti-sperm antibodies ~~exist~~ are present in the prospective mother.

93. (Currently amended) The method according to claim 50, used in conjunction with IVF treatment, ~~whereby the transient hyporeactive immune response is elicited before transfer of the conceptus or gametes is attempted.~~

94-97. (CANCELLED)

98. (NEW) A method according to Claim 50, wherein said infertility condition is a condition associated with maternal immune response to a conceptus in a mammalian prospective mother.

99. (NEW) A method according to claim 50, wherein said infertility condition is selected from the group consisting of miscarriage, spontaneous abortion, pre-eclampsia, early embryonic loss, and implantation failure.

100. (NEW) A method according to claim 50, wherein said infertility condition is miscarriage.

101. (NEW) A method according to claim 50, wherein said infertility condition is spontaneous abortion.

102. (NEW) A method according to claim 50, wherein said infertility condition is pre-eclampsia.

103. (NEW) A method according to claim 50, wherein said infertility condition is early embryonic loss.

104. (NEW) A method according to claim 50, wherein said infertility condition is implantation failure.